

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraphs and headings on page 1, lines 2-26 (numbered lines 3-27) with the following:

BACKGROUND OF THE INVENTION1. Field of the Invention

The present invention relates, in general, ~~in general~~ to electromagnetic valves and more particularly to the electromagnetic valves of an integrated type that has a plurality of electromagnetic valves integrally installed therein.

2. Description of the Related Art

Hitherto, various electromagnetic valve units have been proposed and put into practical use, particularly in the field of wheeled motor vehicles. One of them is shown in Japanese Utility Model Provisional Publication (Jikkaihei) 6-32863. To clarify ~~For clarifying~~ the task of the invention, the electromagnetic valve unit disclosed in JP 6-32863 ~~the publication~~ will be briefly described.

The electromagnetic valve unit of JP 6-32863 ~~the publication~~ comprises generally a rectangular parallelepiped yoke and a pair of electromagnetic valves installed in the yoke. That is, respective solenoid coils of the two electromagnetic valves are installed abreast in the ~~yoke, and the yoke.~~ The yoke has two through openings for mounting therein respective valve function parts of the two valves. When each solenoid coil is energized, a magnetic flux is generated using a part of the yoke as an outside magnetic path. Each solenoid coil has terminal members projected sideward therefrom and upon assembly, the terminal members are projected outward through openings that are formed in a longitudinal end of the yoke.

Please replace the heading and the paragraphs on page 2, lines 2-23 with the following:

~~SUMMARY OF THE INVENTION~~

However, if such layout is practically employed with the aforementioned ~~above-mentioned-known~~ electromagnetic valve unit, the electric connection between the valve unit and the control board would inevitably need ~~inevitably~~ a longer wiring because the terminal members of each solenoid coil are projected outward from the openings formed in the longitudinal end of the yoke, that is, from the openings that are positioned away from the control board. If, to shorten ~~for shortening~~ the wiring, the openings of the yoke ~~through~~ (through which the terminal members are projected outward outwardly projected) are provided in an upper wall of the yoke that is positioned just below the control board, the work for assembling the solenoid coils to the yoke becomes difficult or at least troublesome.

~~It is therefore an~~ An object of the present invention is, therefore, to provide an electromagnetic valve unit that is free of the aforementioned ~~above-mentioned~~ drawbacks.

SUMMARY

According to the present invention, there is provided an electromagnetic valve unit ~~which~~ that comprises a plurality of solenoid coils, which ~~which~~ are abreast installed in a common yoke and which have ~~having~~ their connection terminals projected in the same direction, that is, toward a control board that is to be directly mounted on the yoke.

Please replace the heading on page 3, line 30 with the following:

~~BRIEF DESCRIPTION OF THE DRAWINGS~~ DRAWINGS

Please replace the heading on page 4, line 21 with the following:

~~DETAILED DESCRIPTION OF THE EMBODIMENTS~~

Please replace the paragraphs on page 5, lines 8-16 with the following:

As is best seen ~~from~~ in Fig. 5, in this first embodiment 100, eight electromagnetic valves 2 are installed in a common yoke 3. More specifically, four pairs of electromagnetic valves 2 are abreast arranged in common yoke 3 in order.

Fig. 2 shows, ~~shows~~ in a sectional ~~manner the paired~~ manner, a pair of valves 2. Although these paired valves 2 have a slight difference in construction, their basic structures are generally the same. However, the left valve 2 is of a normally closed type and the right valve 2 is of a normally open type.

Please replace the paragraphs on page 5, lines 21-29 with the following:

As is understood from Figs. 2 and 5, both terminal ends of each winding 7 are connected to respective terminal pins 8 and 8 that are embedded in a rectangular projection 30 provided by bobbin 6. That is, each bobbin 6 has, at ~~has at an upper part~~ part, the rectangular projection 30 through which two terminal pins 8, 8 upwardly project ~~and 8 are projected upward~~.

It is to be noted that the terminal pins 8, 8 project ~~and 8 are projected~~ axially outward with respect to the corresponding solenoid coil 4.

Please replace the paragraph on page 8, lines 28-33 with the following:

First, as was just previously ~~has been just mentioned hereinabove~~, upon putting of a control board onto the unit 100, the electric connection between the unit 100 and the control board is automatically and instantly achieved. That is, there is no need of using longer wiring for such connection, unlike in the case of the ~~afore mentioned publication 6-32862~~ aforementioned JP 6-32863.

Please replace the paragraph on page 9, lines 30-32 with the following:

In the aforementioned ~~above-mentioned~~ first embodiment 100, four pairs of electromagnetic valves 2 are installed in yoke 3. If the length of yoke 3 is increased, more than four pairs can be installed.

Please replace the paragraph on page 10, lines 3-6 with the following:

As ~~Since~~ the unit 200 is similar to the unit 100 of the aforementioned ~~afore-mentioned~~ first embodiment, only parts or portions that are different from those of the unit 100 will be described in detail in the following.

Please replace the paragraphs starting on page 10, line 17 and ending on page 11, line 22 with the following:

As ~~Since~~ the basic structure of valve unit 200 is substantially identical to that of valve unit 100 of the first embodiment, substantially same advantages as those of the valve unit 100 except the third and fourth advantages are also obtained in the valve unit 200 of the second embodiment.

In addition to the aforementioned ~~advantages-just-mentioned~~, the valve unit 200 of the second embodiment has the following advantage.

That is, as ~~since~~ lower wall 20 of yoke 103 has no structure corresponding to the longitudinally extending strips 25 employed in the first embodiment 100, the magnetic paths produced by the paired solenoid coils 4 can constitute continuous paths at lower wall 20.

Accordingly, as is seen from Figs. 6 and 7, the magnetic fluxes of solenoid coils 4 installed in yoke 103 are forced to extend largely ~~extend~~ to a laterally center area of lower wall 20, which means an increase in the magnetic path section that is practically used by each valve 2 and thus the magnetic path resistance is lowered. Thus, the thickness of the common yoke 103 can be further reduced.

Modifications ~~In the following, modifications~~ of the invention will hereafter be

described.

In the aforementioned ~~above-mentioned~~ two embodiments 100 and 200, common yoke 3 or 103 that has both ends 31 opened is used. In such yoke 3 or 103, production is easily carried out with press working applied to a metal plate. If desired, a common yoke of a type having only one end opened may be used in the present invention.

Furthermore, in the present invention, it is not always necessary to arrange electromagnetic valves 2 in such a way that these valves 2 are installed in yoke 3 or 103 forming several pairs of them entirely along the longitudinal axis of yoke 3 or 103. Instead, ~~However,~~ if desired, single valve or valves 2 may be arranged in the row of the paired valves 2.

In the disclosed first and second embodiments, electromagnetic valve units 100 and 200 are described as being applied to an automotive antilock brake system for controlling opening/closing of a fluid passage of the system. Of course, the units 100 and 200 may be applied to other systems that need to control the ~~controlling~~ opening/closing of a fluid passage.